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(54) **DIAGNOSTICS BASED ON TETRAZOLIUM COMPOUNDS**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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**Related U.S. Application Data**

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- (51) **Int. Cl.**<sup>7</sup> ..... **C12Q 1/32; C12M 1/40**  
(52) **U.S. Cl.** ..... **435/26; 435/287.7; 435/287.8; 436/110; 546/168**

- (58) **Field of Search** ..... 435/26, 14, 287.7, 435/287.8; 436/110; 546/168

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(57) **ABSTRACT**

A reagent is suitable for measuring the concentration of an analyte in a hemoglobin-containing biological fluid, such as whole blood. The reagent comprises dehydrogenase enzyme that has specificity for the analyte, NAD, an NAD derivative, pyrrolo-quinoline quinone (PQQ), or a PQQ derivative, a tetrazolium dye precursor, a diaphorase enzyme or an analog thereof, and a nitrite salt. The reagent causes dye formation that is a measure of the analyte concentration. The nitrite salt suppresses interfering dye formation caused non-enzymatically by the hemoglobin. Preferably, the reagent is used in a dry strip for measuring ketone bodies, such as beta-hydroxybutyrate.

**14 Claims, 4 Drawing Sheets**

